

Tech Talent Bill. This bill can help to reverse disturbing trends in the technical credentials of our future workforce.

Studies show that the number of jobs requiring technical training will increase by 51 percent over the next decade. Six million new technical openings are projected to be needed by 2008. But the trend is exactly the opposite, our number of bachelor's degrees has dropped 21 percent in engineering and 32 percent in math and computer science over the last decade.

In the last few years, we've filled many technical positions with foreign workers, and we've heard repeated cries from our high tech industries about their need for larger visa programs to allow these workers to enter the country. In addition, increasing numbers of our undergraduate and graduate students are citizens of another country.

Frequently, both foreign students who have completed technical studies in the United States and foreign technical workers admitted under special visas return to their native lands. That fuels a continuing outflow of technical expertise from our country.

That's good for other countries, who are striving to build up their technical capabilities, but it sure isn't good for the United States. The trend is ominous. In 1985, we led most countries in the number of research personnel as a percent of our workforce. In 1998, we were well behind countries like Japan.

This trend is even worse if we look at young technical workers, because much of our strength is from older workers from past years when technical education was more popular here. If we look at the fraction of 24 year-old workers with technical training, the U.S. lags behind many countries including Japan, Korea, Germany, Ireland, Canada, France and the United Kingdom.

This problem is even more evident if we look at the fraction of bachelor-level degrees awarded in science and engineering. In the United States, the figure is about one-third. But in China, our one-third is replaced by their 72 percent, and Japan, Russia and Brazil exceed 60 percent. In all of Asia, 47 percent of all degrees are in science and engineering. It's even worse if we focus on engineering, where 5 percent of our bachelor's degrees are awarded. In China, that figure is 46 percent. And that figure is 30 or more percent in countries like Germany, Russia, Singapore, and Finland, and over 20 percent in many countries including Japan, France and Sweden.

Traditionally, the United States has led the world in patents. But if we look at the growth in patenting in the U.S. and elsewhere, the trend is serious. Countries like Japan have higher growth rates in patenting than we do.

I already noted the importance of innovation in driving our economic growth. We don't compete well in the international marketplace on manufac-

ture of low-tech goods. In fact, where a product has been on the market for awhile, other countries tend to capture the manufacturing market. That's why it's so critical that we maintain a strong flow of innovative products it's in the newest, highest technology, products that we are most competitive.

We can't afford to maintain some of the current trends. We were graduating about 18,000 students a year with bachelor's degrees in the physical sciences in the 1970s, today that figure is around 15,000. As another bad example, our graduates in mathematics have fallen to about half the 25,000 graduates per year in the 1970s.

We need to reverse these trends. We need to excite more students to pursue technical careers. We need to do far better at showing students the opportunities that can open for them if they pursue technical paths in their education.

This bill will help in this quest. By providing grants to schools and community colleges to increase their production of technical workers, we are providing direct motivation to the schools which have a significant hand in guiding students into various fields. These grants will serve to challenge schools to find better, more convincing, approaches to encourage student behavior.

It was particularly important to me that this bill offer these incentives at the community college level. Students are increasingly finding that these institutions offer the best match to their educational needs. It will be at the community college level that we can excite many new students who might have chosen other specialties.

Reversing the trends I've described won't happen overnight, it will take many years. But the future benefits to our young people and to our nation are immense. I'm pleased to join the cosponsors of this important bill in seeking to address this very real issue.

AMENDMENTS SUBMITTED AND PROPOSED

SA 1902. Mr. LIEBERMAN submitted an amendment intended to be proposed by him to the bill H.R. 2506, making appropriations for foreign operations, export financing, and related programs for the fiscal year ending September 30, 2002, and for other purposes; which was ordered to lie on the table.

TEXT OF AMENDMENTS

SA 1902. Mr. LIEBERMAN submitted an amendment intended to be proposed by him to the bill H.R. 2506, making appropriations for foreign operations, export financing, and related programs for the fiscal year ending September 30, 2002, and for other purposes; which was ordered to lie on the table, as follows:

On page 125, line 16, before the period at the end of the line insert the following: "Provided further, That, of the funds appropriated under this heading, not less than \$400,000 shall be made available on a grant basis as a cash transfer for support of the

Foundation for Children at Risk Donald J. Cohen and Irving B. Harris Center for Trauma and Disaster Intervention, housed at the Tel Aviv Mental Health Center, whose counseling of children and families and training of mental health professionals are crucial to reducing the human suffering and repairing the societal damage from violence against civilians of all faiths in Israel, Israeli settlements, and territory administered by the Palestinian Authority".

AVIATION SECURITY ACT

On October 11, 2001, the Senate passed S 1447, as follows:

S. 1447

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Aviation Security Act".

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—AVIATION SECURITY

Sec. 101. Findings.

Sec. 102. Transportation security function.

Sec. 103. Aviation Security Coordination Council.

Sec. 104. Improved flight deck integrity measures.

Sec. 105. Deployment of Federal air marshals.

Sec. 106. Improved airport perimeter access security.

Sec. 107. Enhanced anti-hijacking training for flight crews.

Sec. 108. Passenger and property screening.

Sec. 109. Training and employment of security screening personnel.

Sec. 110. Research and development.

Sec. 111. Flight school security.

Sec. 112. Report to Congress on security.

Sec. 113. General aviation and air charters.

Sec. 114. Increased penalties for interference with security personnel.

Sec. 115. Security-related study by FAA.

Sec. 116. Air transportation arrangements in certain States.

Sec. 117. Airline computer reservation systems.

Sec. 118. Security funding.

Sec. 119. Increased funding flexibility for aviation security.

Sec. 120. Authorization of funds for reimbursement of airports for security mandates.

Sec. 121. Encouraging airline employees to report suspicious activities.

Sec. 122. Less-than-lethal weaponry for flight deck crews.

Sec. 123. Mail and freight waivers.

Sec. 124. Safety and security of on-board supplies.

Sec. 125. Flight deck security

Sec. 126. Amendments to airmen registry authority.

Sec. 127. Results-based management.

Sec. 128. Use of facilities.

Sec. 129. Report on national air space restrictions put in place after terrorist attacks that remain in place.

Sec. 130. Voluntary provision of emergency services during commercial flights.

Sec. 131. Enhanced security for aircraft.

Sec. 132. Implementation of certain detection technologies.

Sec. 133. Report on new responsibilities of the Department of Justice for aviation security.

Sec. 134. Definitions.